REMARKS

Claims 1-12 are pending. By this amendment, claims 1, 2, 4, 7-12 are amended. No new matter has been added. Reconsideration in view of the amendments and following remarks is respectfully requested. The attached Appendix includes marked-up copies of each rewritten paragraph claim (37 C.F.R. §1.121(c)(1)(ii)).

I. THE SPECIFICATION SATISFIES ALL FORMAL REQUIREMENTS

The Office Action objects to the abstract because of its form. The abstract is amended to obviate the objection. Withdrawal of the objection in the specification is respectfully requested.

II. THE CLAIMS SATISFY ALL FORMAL REQUIREMENTS

The Office Action rejects claims 1, 4 and 8 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 1, 4 and 8 have been amended to obviate this rejection. Applicants submit that the claims now meet all formal requirements.

The Office Action rejects claim 9 under 35 U.S.C. §112, first paragraph, for failing to enable any person skilled in the art to carry out the invention. Claim 9 has been amended in conformance with the Examiner's suggestion. Applicants submit that the claim now meets all formal requirements.

II. THE CLAIMS CONTAIN ALLOWABLE SUBJECT MATTER

A. Harada et al. in View of JP '427

The Office Action rejects claims 1, 2, 8 and 9 under 35 U.S.C. §103(a) as being obvious over Harada et al. (U.S. Patent No. 5,096,767) in view of Japanese Patent No. 05230427. This rejection is respectfully traversed.

Claim 1 recites a tack label comprising a label base material, a printing layer formed on a first surface of the label base material and an adhesive layer formed on a second surface

which opposes the first surface of the label base material wherein the adhesive layer comprises a hot water soluble adhesive which is difficult to dissolve in water at normal temperature and easy to dissolve in hot water. It is respectfully submitted that none of the references of record teach, disclose or suggest the claimed invention.

In particular, Harada does not teach a label that is hot water soluble. On the contrary, Harada relates to an alkali removable label comprising a base paper material and an anchor label on at least one side of a radiation curable composition cured in place on the paper layer, the composition comprising at least one radiation curable monomer and a radiation curable carboxylic acid. Thus, Harada is exclusively directed to removing labels through an alkali treatment (col. 3, lines 21-30).

The Office Action admits that Harada does not teach hot water soluble adhesive. The Office Action attempts to overcome the shortcoming by citing JP '427. However, JP '427 does not make up for the deficiencies of Harada.

JP '427 does not teach an adhesive label comprising an acrylic water soluble adhesive for the purposes of creating a label whose adhesive layers easily dissolved in water at high temperature and hard to remove at normal temperature. On the contrary, JP '427 discloses an adhesive for a label, comprising (A) at least one emulsion selected from a copolymer emulsion of ethylene-vinyl ester and a poly(metha)acrylate and (B) an alkali-soluble or alkali-swellable, but water non-soluble material.

It is respectfully submitted that the computer-generated translation of JP-427 relied upon in the Office Action is inaccurate and contrary to the actual disclosure of the reference. In particular, the Japanese patent translation itself states on the first page that "This document has been translated by computer. So the translation may not reflect the original precisely." To correct the record, attached herewith is a verified translation of relevant portions of the JP '427 patent.

The proper translation of the Japanese reference provides that the abstract of the Japanese patent translation is missing "water non-soluble" and further that "alkali-soluble" is not disclosed, rather "alkali-fusibility" is disclosed in the reference. In addition, paragraph 13 of JP '427 is properly read as reciting an acid type highly water absorbable resin as one option of the alkali-soluble or alkali-swellable, but water non-soluble material, and thus cannot teach a water soluble label.

In addition, page 5, lines 19-29 of JP '427 recites the results of a cold water emersion test, not a hot water adhesion test. It is respectfully submitted that 10°C (approximately 50°F) would be understood by one of ordinary skill in the art to teach cold water properties and not reflect a normal water temperature of around 20°C (approximately 68°F). As described on pages 10 and 11 of the specification, the peeling characteristics of one embodiment of the claimed invention was tested in water of varying temperatures. The tested temperatures were 22°C, 40°C (approximately 104°F) and 75°C (approximately 167°F). Therefore, because the test piece was immersed in a 4% sodium hydroxide aqueous solution and not in hot water but rather cold water, it is respectfully submitted that JP '427 does not teach or disclose the label as recited in claim 1.

Similar to claim 1, independent claim 8 recites a plastic container with a tack label stuck on a container body, the tack label comprising a label base material, a printing layer formed on a first surface of the label base material and an adhesive layer formed on the second surface that opposes the first surface of the label base material. The adhesive layer comprises a hot water soluble adhesive having a property which is difficult to dissolve in water at normal temperature and easy to dissolve in hot water. Thus, the tack label is easy to peel from the container body under an environment with hot water while difficult to peel from a container under a processing environment with normal temperature water. It is

respectfully submitted that none of the references of record disclose, teach or suggest these claim features for the reasons submitted above.

Because the label of Harada and JP '427 teach an alkali-soluble label and not a hot water soluble label that is difficult to remove under normal water temperature, one having ordinary skill in the art at the time the invention was made would not apply the two references to achieve a tack label with an adhesive layer comprising a hot water soluble adhesive that is difficult to remove in water at normal temperature and easy to remove in hot water, as recited in claim 1, and is similarly recited in claim 8. Therefore, it is respectfully submitted that it would not have been obvious to combine Harada and JP '427 to teach the invention recited in claims 1 and 8 as the cited references do not teach or suggest all of the claim limitations as required under MPEP §2142.

It is respectfully submitted that claims 1 and 8 are patentable over the references of record. Further, it is respectfully submitted that claims 2 and 9 are patentable at least in view of the patentability of claims 1 and 8 from which they respectively depend, as well as for the additional features they recite. Withdrawal of the rejection is respectfully requested.

B. Harada in View of JP '427, Ichinose and Preuss

The Office Action rejects claims 3-6 and 10-11 under 35 U.S.C. §103(a) over Harada in view of JP 05230427, and further in view of Ichinose et al. (U.S. Patent No. 4,269,321) and Preuss (U.S. Patent No. 6,023,865). This rejection is respectfully traversed.

For all of the reasons set forth above, the primary references Harada and JP '427 fail to teach or suggest all of the limitations of the claimed invention. In particular, neither Harada nor JP '427 disclose, teach or suggest an adhesive layer comprising a hot water soluble adhesive that is difficult to dissolve in water at normal temperature and easy to dissolve in hot water, as claimed. In fact, the contradictory teachings of Harada and JP '427,

discussed in detail above, would led one of ordinary skill in the art away from the presently claimed invention, and would not have rendered obvious the claimed invention.

Ichinose et al. and Preuss do not overcome the deficiencies of Harada et al. and JP '427. Neither reference teaches or suggests to use a water-soluble adhesive in place of the alkali-soluble but water-insoluble adhesive of Harada et al.

In addition, Ichinose does not teach, disclose or suggest a masking layer to limit the amount of adhesive surface contact in the bottle, as recited in claim 4. On the contrary, Ichinose et al. discloses a non-adhesive masking layer 52 formed at the peeling initiation portion between a coating layer 14 and packing 15 (col. 16, lines 32-34). There is no motivation to combine the references to practice the claimed invention because Ichinose et al. is directed towards the creation of a peeling initiation portion, not to utilize a masking layer to limit the amount of adhesive surface contacting the bottle.

The Office Action cites Preuss to teach the use of a ring-shaped adhesive layer about the perimeter of a label. Preuss, however, solves a different problem as only the ring layer is in contact with the edges of a concaved depression on a bottle bottom. There is no motivation to combine Preuss with the references to teach the claimed invention because Preuss is solving a problem that does not exist in the claimed invention. Therefore, it would not have been obvious to modify Harada et al. in view of JP 05230427 in further view of Preuss to teach the ring-shaped adhesive area, as recited in claim 4. The ring-shaped structure is not being used to traverse a concave depression, but to minimize the amount of adhesive used in affixing a label to a bottle wall surface. Therefore, there would be no teaching to combine Preuss with the cited references.

For at least these reasons, claims 3-6 and 10-11 are further patentable over the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

C. Harada et al. in View of JP 427 and Fujii

The Office Action rejects claims 7 and 12 under 35 U.S.C. §103(a) over Harada et al. in view of JP 05230427, and further in view of Fujii (JP 410316819A). This rejection is respectfully traversed.

For all of the reasons set forth above, the primary references Harada et al. and JP '427 fail to teach or suggest all of the limitations of the claimed invention. In particular, neither Harada et al. nor JP '427 disclose, teach or suggest an adhesive layer comprising a hot water soluble adhesive that is difficult to dissolve in water at normal temperature and easy to dissolve in hot water, as claimed. In fact, the contradictory teachings of Harada et al. and JP '427, discussed in detail above, would led one of ordinary skill in the art away from the presently claimed invention, and would not have rendered obvious the claimed invention.

Fujii does not overcome the deficiencies of Harada et al. and JP '427. Fujii does not teach or suggest to use a water-soluble adhesive in place of the alkali-soluble but water-insoluble adhesive of Harada et al.

On the contrary, Fujii teaches an adhesive sheet exhibiting a hand tearing property by laminating adhesive layers on a base material sheet consisting of a soft vinyl chloride resin. The soft vinyl chloride resin used is taught as having a bulk specific gravity of 0.05 to 0.50. There would be no motivation to combine Fujii with Harada et al. in view of JP '427 to practice the claimed invention because Fujii is directed to a soft vinyl chloride resin, whereas the claimed invention is directed to an acrylic water soluble adhesive. Therefore, it is respectfully submitted that it would not have been obvious to combine Harada et al. and JP '427 in further view of Fujii to teach the label base material, as recited in claim 7, as the cited references do not reach or suggest all of the claim limitations as required under MPEP §2142.

For at least these reasons, claims 7 and 12 are further patentable over the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

III. CONCLUSION

In view of the foregoing amendments and remarks, applicants submit that this application is condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Joel S. Armstrong
Registration No. 36,430

JAO:JPH/can

Attachments:
Petition for Extension of Time
Appendix
Substitute Abstract
Translation

Date: May 8, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461

ABSTRACT

A tack label difficult to peel from a container in a processing environment with normal temperature water and easy to peel from the container in a processing environment with hot water and a plastic container. The tack label according to this invention includes a label base material, a printing layer formed on one surface of this label base material, and an adhesive layer formed on the surface of the other of a label base material. The adhesive layer comprises an adhesive that is difficult to dissolve under an environment with normal temperature water and easy to dissolve under a processing environment with hot water. The result is a tack label that is difficult to peel from the container in a washing process, but easy to peel in a regenerating process.

APPENDIX

Changes to Abstract:

The following is a marked-up version of the amended Abstract:

A tack label difficult to peel from a container ~~under~~ in a processing environment with normal temperature water and ~~ease~~ easy to peel from the container ~~under~~ in a processing environment with hot water and a plastic container.

~~———~~The tack label ~~according to this invention~~ includes a label base material, a printing layer formed on one surface of this label base material, and an adhesive layer formed on the surface of the other of a label base material~~, wherein~~. ~~the~~ The adhesive layer comprises an adhesive ~~which~~ that is difficult to dissolve under an environment with normal temperature water and easy to dissolve under a processing environment with hot water. ~~By so constructing, the~~The result is a tack label ~~which~~ that is difficult to peel from the container in a washing process, but easy to peel in a regenerating process ~~as well as the plastic bottle with such a tack label are realizable~~.

Changes to Claims:

The following is a marked-up version of the amended claims:

1. (Amended) A tack label comprising a ~~sheet like~~ label base material, a printing layer formed on a first surface of the label base material, and an adhesive layer formed on a second surface which opposes the first surface of the label base material, ~~characterized by~~ wherein said adhesive layer ~~comprising~~ comprises a hot water-soluble adhesive which is difficult to dissolve in water at normal temperature and easy to dissolve in hot water.

2. (Amended) The tack label according to claim 1, wherein said adhesive layer comprises an acrylic water-~~solubility~~soluble adhesive.

4. (Amended) Tack label according to claim ~~2~~ 3, wherein said masking layer is formed nearly in a central part of the adhesive layer, and said adhesive layer has a ring-shaped adhesive area.

7. (Amended) The tack label according to ~~the~~ claim 1, wherein said label base material comprises a material whose specific gravity is less than one.

8. (Amended) A plastic container with a tack label stuck on a container body, ~~characterized in that~~ wherein said tack label comprises a ~~sheet-like~~ label base material, a printing layer formed on a first surface of the label base material, and an adhesive layer formed on a second surface which opposes the first surface of the label base material for adhering the tack label on the surface of the container body, said adhesive layer comprises a hot water-soluble adhesive having ~~the~~ a property which is difficult to dissolve in water at normal temperature and easy to dissolve in hot water, whereby said tack label is easy to peel from the container body under an environment with hot water while ~~easy~~ difficult to peel from a container body under a processing environment with the normal temperature water.

9. (Amended) The plastic container according to ~~the~~ claim 8, wherein said tack label is easily peeled by hand from the container body within 30 minutes when the container body is immersed in 75°C hot water, while said tack label is not easily peeled by hand from the container body in a lapse of 30 minutes after the container body is immersed in 40°C water.

10. (Amended) The plastic container according to ~~the~~ claim 8, wherein a non-adhesive masking layer is formed in a part of said adhesive layer, and only ~~of~~ a part of the tack label has adhered on the surface of the container body.

11. (Amended) The plastic container according to ~~the~~ claim 10, wherein a ring-shaped adhesion area is formed between said tack label and the container body.

12. (Amended) Tack label according to ~~the~~ claim 8, wherein the label base material of said tack label comprises a material whose specific gravity is less than one.